

IN THE SPECIFICATION

Please rewrite the paragraph at page 2, lines 8-9 as follows:

Conventionally, a charge coupled device (CCD) has been used as a solid-state image pickup device frequently because the CCD has a high signal to noise (S/N) ratio. On the other hand, the so-called amplification-type solid-state image pickup apparatus has been also developed because of its simple usage and of its low power consumption. The amplification-type solid-state image pickup apparatus is the device that introduces signal charges accumulated on light-receiving pixels to the control electrodes of transistors provided at pixel portions to output signals amplified by the transistors from their main electrodes. There are the following amplification-type solid-state image pickup apparatus: a static induction transistor (SIT) type image sensor using SITs as amplifying transistors (A. Yusa, J. Nishizawa et al., "SIT image sensor: Design consideration and characteristics," IEEE trans. Vol. ED-33 pp. 735-742, June 1986), a bipolar amplifying solid-state image sensor (BASIS) using bipolar transistors (N. Tanaka et al., "A 310 K pixel bipolar imager (BASIS)," IEEE Trans. Electron Devices, vol. 35, pp. 646-652, May 1990), a charge modulation device (CMD) using a junction-type field effect transistor (JFETs) in which control electrodes form depletion layers (Nakamura et al., "Gate Accumulation Type MOS Phototransistor Image Sensor", ~~Television Society Journal~~, 41, 11, pp. 1075-1082, Nov., 1987 National Conference of Television Society, 3-7, 1986), a complementary metal oxide semiconductor (CMOS) sensor using metal oxide semiconductor (MOS) transistors (S. K. Mendis, S. E. Kemeny and E. R. Fossum, "A 128 x 128 CMOS active image sensor for highly integrated imaging systems," in IEDM Tech. Dig., 1993, pp. 583-586), and the like. In particular, the CMOS sensor matches CMOS processes well and peripheral CMOS circuits can be formed on the chip of the CMOS sensor. Accordingly, the CMOS sensors are being

energetically developed. A common problem of the amplification-type solid-state image pickup apparatus is that the amplifying transistors provide their respective output offsets to produce a fixed pattern noise (FPN) in signals of the image sensor. Conventionally, various signal reading circuits have been devised to remove the FPN. Besides, the CMOS sensor has the disadvantage that the number of transistors for constituting a pixel is large to make it difficult to reduce the area of the pixel.